WHAT IS CLAIMED IS:

1. An MPEG video decoding method, comprising:

determining whether to perform motion compensation on motion-vector-decoded data or not depending on a value of a decoded motion vector;

determining whether to perform inverse discrete cosine transformation (IDCT) on motion-compensated data or not depending on a plurality of values of decoded DCT coefficients; and

generating a decoded image based on the results of the two determination steps.

2. The MPEG video decoding method of claim 1, wherein determining whether to perform motion compensation or not comprises:

determining whether or not the decoded motion vector is 0; and

determining not to perform motion compensation if the decoded motion vector is 0 and determining to perform motion compensation if the decoded motion vector is not 0.

3. The MPEG video decoding method of claim 1, wherein determining whether to perform inverse DCT or not comprises:

determining whether or not the value of each decoded DCT coefficient is 0; and

determining not to perform inverse DCT if the value of each decoded DCT coefficient is 0 and determining to perform inverse DCT if the value of any decoded DCT coefficient is not 0.

4. An MPEG video decoding method, comprising:

generating a predicted image macroblock;

generating a differential image macroblock;

generating a decoded image macroblock by adding the predicted image macroblock and the differential image macroblock;

writing the decoded image macroblock in a frame buffer; and

filling the frame buffer with decoded image macroblocks by circularly performing the previous steps.

5. An MPEG video decoding method, comprising:

generating a predicted image macroblock depending on a value of a decoded motion vector;

writing the predicted image macroblock in a macroblock buffer;

generating a differential image macroblock depending on a plurality of values of decoded DCT coefficients;

generating a decoded image macroblock by adding the differential image macroblock to the predicted image macroblock written in the macroblock buffer; and

writing the decoded image macroblock in a frame buffer.

6. The MPEG video decoding method of claim 5, wherein generating the predicted image macroblock comprises:

determining whether or not the decoded motion vector is 0;

determining a previous image macroblock as the predicted image macroblock if the decoded motion vector is 0; and

generating the predicted image macroblock by performing motion compensation on the previous image macroblock if the decoded motion vector is not 0.

7. The MPEG video decoding method of claim 5, wherein generating the differential image macroblock comprises:

determining whether or not the value of each decoded DCT coefficient is 0;

determining not to generate the differential image macroblock if the value of each decoded DCT coefficient is 0; and

generating the differential image macroblock by performing inverse DCT if the value of any decoded DCT coefficient is not 0,

wherein if the differential image macroblock is not generated, adding the differential image to the predicted image is skipped.

8. An MPEG video decoder, comprising:

a motion vector determiner determining whether to perform motion compensation or not depending on a value of a decoded motion vector; and

a DCT coefficient determiner determining whether to perform inverse discrete cosine transform (IDCT) or not depending on a plurality of values of decoded DCT coefficients,

wherein an MPEG video stream is decoded based on determinations of the motion vector determiner and the DCT coefficient determiner.

9. The MPEG video decoder of claim 8, wherein the motion vector determiner determines not to perform motion compensation if the decoded motion vector is 0, and determines to perform motion compensation if the decoded motion vector is not 0.

10. The MPEG video decoder of claim 8, wherein the DCT coefficient determiner determines not to perform inverse DCT if the value of each decoded DCT coefficient is 0, and determines to perform inverse DCT if the value of any decoded DCT coefficient is not 0.

11. An MPEG video decoder, comprising:

a predicted image calculation unit generating a predicted image macroblock;

a differential image calculation unit generating a differential image macroblock;

a macroblock buffer where the predicted image macroblock and the differential image macroblock are added; and

a frame buffer where a decoded image macroblock is written, after the decoded image macroblock is generated by adding the predicted image macroblock and the differential image macroblock in the macroblock buffer is written.

12. An MPEG video decoder, comprising:

a predicted image calculation unit generating a predicted image macroblock depending on a value of a decoded motion vector;

a differential image calculation unit generating a differential image macroblock depending on a plurality of values of decoded DCT coefficients;

a macroblock buffer where the predicted image macroblock and the differential image macroblock are added; and

a frame buffer where a decoded image macroblock is written, after the decoded image macroblock is generated by adding the predicted image macroblock and the differential image macroblock in the macroblock buffer.

13. The MPEG video decoder of claim 12, wherein the predicted image calculation unit comprises:

a motion vector determiner determining whether or not the decoded motion vector is 0; and

a motion compensator performing motion compensation depending on a result of the determination.

14. The MPEG video decoder of claim 12, wherein the differential image calculation unit comprises:

a DCT coefficient determiner determining whether or not the value of each decoded DCT coefficient is 0; and

an inverse discrete cosine transformer performing inverse DCT depending on a the result of the determination.